

REMARKS

Claims 1-22 remain in this application. In the Office Action dated May 19, 2004, Claims 1-22 were rejected for obviousness-type double patenting in view of the claims of U.S. Patent No. 6,610,052 to Furumoto, Claims 1-13 and 19-22 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,027,495 to Miller ("Miller '495"), and Claims 14-18 were rejected under 35 U.S.C. § 103 as being obvious over Miller '495 and U.S. Patent No. 5,964,749 to Eckhouse *et al.* For the following reasons, it is believed that these rejections are all overcome, and that the present claims should be allowed.

Double Patenting

Claims 1-22 stand rejected for obviousness-type double patenting in view of the claims of U.S. Patent No. 6,610,052 to Furumoto. A terminal disclaimer with respect to U.S. 6,610,052 is attached to obviate this rejection.

Anticipation and Obviousness Rejections

Applicant respectfully requests reconsideration and withdrawal of the anticipation and obviousness rejections. In particular, the § 102 and § 103 rejections made in the Office Action should be withdrawn because they rely on subject matter which is not prior art against the present claims. In rejecting all of the present claims, the Examiner specifically cites to, and relies upon, portions of the Miller '495 patent (*e.g.*, Col. 11, lines 11-17, and Claims 9-10) which have an effective prior art date that is later than the priority date of the present claims, thus disqualifying this subject matter as prior art against these claims. The Miller '495 patent is a continuation of an earlier application filed on May 20, 1996. This is later than the April 9, 1996 effective filing date of the present claims. The Miller '495 patent is also related as a "continuation-in-part" to an even earlier application filed on October 23, 1995, which does pre-date the effective filing date of the present claims. However, this earlier application did not include the subject matter which is now being cited against the present claims. This is evident from U.S. 5,658,323 to Miller (the "Miller '323"), which issued from the October 23, 1995 application. (Miller '323 was submitted as reference AB2 in the Information Disclosure Statement filed on November 6,

2003 in the present case). The Miller '323 patent does not disclose, for example, the plurality of 1-3 millisecond pulses that is now being cited against the present claims. This subject matter was added as "new matter" in the continuation-in-part filed on May 20, 1996, which was filed later than the effective filing date of the present application. Therefore, this subject matter was improperly cited as prior art against the present claims.

It should be pointed out that at least one other reference with an effective reference date that appears to be earlier than the effective filing date of the present claims does discuss a train of pulses. The Eckhouse '749 patent relates to collagen heating and skin resurfacing, and discusses a "train of pulses." (See, e.g., Eckhouse '749 at col. 5, lines 37-38; col. 6, lines 28-30). However, neither the Eckhouse '749 patent, nor any of the prior art of record in this case, teach or suggest a treatment method or system comprising a series of sub-pulses that are characterized by both "a periodicity that is less than the thermal relaxation time of a targeted structure," and an "interpulse-delay between successive sub-pulses that is greater than the thermal relaxation time of non-targeted structures within the treatment area," as is recited in all of the present claims.

An advantage of this invention is that by treating tissue with a series of sub-pulses, where the periodicity of the pulses is less than the thermal relaxation time of targeted structures, the sub-pulses have a cumulative heating effect on the targeted structures (such as hair follicles and enlarged blood vessels, for instance). At the same time, because the inter-pulse delay time between sub-pulses is longer than the thermal relaxation time of non-targeted structures (such as small blood vessels, for instance), each sub-pulse in the series will act independently on these non-targeted structures. There is thus little or no cumulative heating effect on these non-targeted structures, and unwanted damage to these structures is minimized. This technique can be advantageously utilized to control the size of the targets to be heated and the maximum temperature to be reached. (See Specification at, for example, p. 16, lines 10-20).

Because this combination of the periodicity of the sub-pulses being less than the thermal relaxation time of targeted structures, and the inter-pulse delay being greater than the thermal relaxation time of non-targeted structures, is not taught or suggested in the prior art of record, it is respectfully submitted that the Examiner's anticipation and obviousness rejections are overcome, and that the present claims should all be allowed.

CONCLUSION

In view of the above remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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